Q&Q Control Services

Certificate of Quality - ISO-F-DMA

ISO 8217:2010

Vessel :	**M/T Anuket Ruby**
Sample description:	**Vol. ship composite (1W, 3W, 4W, Slop P)**
Location at sampling:	**Offshore Lome, Togo**
Product:	**Gasoil**
Sample drawn by:	**Q&Q Control Services, Togo**
Analysed by:	**Q&Q Control Services Togo laboratory**

Sampled Date: 30th August 2015
Analysis Date : 31st August 2015
Lab No: QQTG/08/15-1430
QQ file: R-TGO157558
Monjasa Ref: WAF0073

METHOD	PROPERTY	UNIT	ISO 8217:2010	RESULT
ISO 3104	Kinematic Viscosity at 40°C	mm^2/s	2.000 - 6.000	5.635
ISO 3675	Density @ 15°C	kg/m3	890.0 max	888.4
ASTM D86	Distillation			
ISO 4264	Cetane Index		40 min	40.12
ISO 8754	Sulphur Content	% m/m	0.1 max	0.094
ISO 2719	Flash Point (Pensky-Martens)	°C	60 min	65
ASTM D 974-14$^{\varepsilon 1}$	Acid Number	mg KOH/g	0.5 max	0.04
ISO 12205	*Oxidation Stability	g/m3	25 max	13.5
ISO 10370	*Micro Carbon Residue on 10% distillate residues	% m/m	0.30 max	0.02
ISO 3016	Pour Point (upper) summer quality	°C	0 max	-6
Visual	Appearance (at temp in range 10°C to 25°C)		clear & bright	clear & bright
Visual	Colour (dyed or undyed)		report	undyed
ASTM D482/13	Ash Content	% m/m	0.010 max	0.001
ISO 12156-1	*Lubricity, corrected wear scar diameter 1.4 at 60°C*	*µ m*	*520 max*	N/A

Note: Analysis performed by third party laboratory*

Note: Samples drawn via closed (vapour-lock) and may not be fully representative

Lubricity test is only required when sulphur content is determined at less than 0.050 % mass.

remark:Appearance test to be conducted in good light free from glare or shadow. On non transparent dyed product, the water content is not to exceed 200 mg/kg when tested by Karl Fischer method in accordance with ISO 12937
With the exception of test marked (*) that were done by third party Laboratory all the remaining test were performed at. Q&Q Togo laboratory. The third party laboratory retains all responsibility for equipment, reagents conditions and calibration, and for the competence of personnel responsible for laboratory operation and testing methodology and performance.
In case of disputed results, reference is to be made to processes contained in relevant sections of ISO standard 4259.

Signature:

Issued by Q&Q Togo Laboratory
Date: 31st August 2015